
INTERNATIONAL BULLETIN OF PLANT PROTECTION

DISCOVERIES AND CURRENT EVENTS *

England : The Chrysanthemum Midge, *Diarthronomyia hypogaea*, F. Löw (1).

This insect was first detected in Great Britain in April, 1927 in the Lea Valley district of England, having apparently been imported from the U. S. A. with cuttings of greenhouse Chrysanthemums. Further examination of the nurseries to which American cuttings had been sent resulted in the discovery of the pest in 5 nurseries outside the Lea Valley. Measures were taken under the Destructive Insects and Pests Acts to eradicate the pest and attained a considerable measure of success, but in the autumn of 1928 it was found that 4 nurseries were still infected. More drastic measures were thereupon taken in regard to these nurseries and they are now apparently free from the pest. It will not, however, be possible to say until the autumn of 1929 whether the eradication has been complete.

The Chrysanthemum Midge is recorded as an insect of European origin, the strain in Europe attacking wild plants of the family Compositae. When these latter plants are attacked the insect affects the roots, but in the greenhouse Chrysanthemums galls are produced on the leaves and stems. The methods of control comprise the repeated spraying of the plants with nicotine and soap and the burning of the aerial portions of the plants after flowering. Cuttings from infested nurseries may be distributed to other nurseries only after they have been found to be free from galls, and after dipping in a nicotine and soap mixture.

Belgium : Cryptogamic Parasites of Crops in 1928 (2).

Cereals. — The spread of an outbreak of yellow rust of wheat (*Puccinia glumarum*) which appeared in the spring has been checked by a dry period. Black rust (*Pucc. graminis*) remains rare in Lower and Central Belgium. In the Ardennes March wheat and late oats have suffered cases rather seriously.

Take-all (*Ophiobolus graminis*) is at the present time the wheat disease which attracts most attention. In the spring of 1928 its spread was particularly serious.

A considerable number of cases of ergot (*Claviceps purpurea*) have been noted on rye and also on wheat.

* In this, as in the next chapter, the countries are arranged in French alphabetical order.

(1) Communication from the Ministry of Agriculture and Fisheries, London, official correspondent of the Institute.

(2) Communication from the official correspondent to the Institute, M. Em. MARCHAL, Director of the State Phytopathological Station at Gembloux.

Potato. — Several new centres of wart disease (*Synchytrium endobioticum*) have been found in the country.

The chief Inspector of the Phytopathological Service, Prof. VAN HOVE, reports the following localities to be infected:—

Province of Hainaut, Charleroi division: Ciurcelles, Gosselies, Roux, Souvret and Trazegnies;

Province of Liège, Liège division: Forêt and Fraipont; Verviers division: Sart, Spa and Stavelot;

Province of Limbourg, Maeseyck division: Hamont, Neerpelt and Peer.

Potato blight (*Phytophthora infestans*) has been almost non-existent, thanks to dry summer, except in the Ardennes where late varieties were slightly infected.

Sugar beet. — Beet as usual has been little attacked by cryptogamic parasites. Some outbreaks of *Peronospora Schachtii* have occurred, however, producing changes in the upper part of the root.

Turnips and Swedes. — In various regions there are increasing complaints of the spread of finger-and-toe (*Plasmodiophora Brassicae*) which appears to be due to the frequent repetition of Crucifers in the rotation of crops and to the extensive use of acid fertilisers.

Clover. — Rot (*Sclerotinia Trifoliorum*) and scorch (*Gloeosporium caulivorum*) have been somewhat serious.

Market garden plants. — Witloof chicory has been attacked by a form of *Hypochnus Solani*. The etiolated shoots sometimes showed blackish veins as a result of a bacterial infection.

Forest trees. — The elm disease caused by *Graphium Ulmi* has continued its destruction. Spraying with manganese sulphate has had no effect, but in trunk injections it appears to have a stimulating influence, of which the after effects must be watched. In the beech woods of the Ardennes a decay has appeared which seems to be connected with attack by *Polyporus adustus*.

No new cryptogamic parasite of interest has been found in the country.

Belgian Congo: Some New Cotton Diseases (1).

Rhizoctonia bataticola causing a disease of the young plants (Sankuru, Maniema, Uele).

"Rust" of the leaves caused by Jassids, potassium deficiency in the soil, *Sphaerella gossypina* Ath., *Kuehneola Gossypii* (Maniema, Uele).

"Mosaic" of the leaves caused by the following organisms:—*Cercospora Gossypii*, *Bacterium Malvacearum*, *Cercospora gossypina*, *Macrosporium nigricantium* and *Helminthosporium Gossypii* (Maniema, Kivu, Uele).

"Anthracnose" of the capsule caused by *Colletotrichum* sp. and *Gloeosporium Gossypii* (Maniema, Uele).

"False anthracnose" caused by *Fusarium vasinfectum* and *Cylindrophora* sp. (conidial forms of *Neocosmospora vasinfecta*), which penetrate to the interior of the capsules by means of wounds made by *Dysdercus* sp.; these parasites also attack the plant itself to a slight extent, causing canker of the collar (Uele, Maniema).

(1) Communication from the official correspondent to the Institute, Dr. P. STANER, Director of the Mycological Laboratory at Eala.

“Stilbosis” of the capsule : *Stilbum* sp. showing its synemas with yellow heads on the external walls (conidia $3.5-5 \times 1.5 \mu$; head 100μ in diameter).

Attack of the fibre by (a) *Colletotrichum* sp. with very long black setae (200-400 μ) and conidia measuring $18-20 \times 3-4 \mu$; (b) *Rhizopus nigricans*.

Bacterial disease of the capsules caused by *Bacterium Malvacearum*.

Withering of the stem caused by *Diplodia gossypina* after Nematode damage.

India : Mosaic Disease of Chillies (*Capsicum annum*) in the Bombay Presidency (1).

In the Bombay Presidency, an obscure disease of chillies which shows itself in the reduced size of leaves etc., causes considerable damage to this crop every year. An investigation into this disease has shown it to be the mosaic disease. Infection of healthy plants grown in insect-proof, muslin cages has been carried out by means of the juice from diseased plants. Thrips have been shown to be the most efficient agents for transmission of the chilli virus.

Italy : Moroccan Locust (*Doclostaurus maroccanus*) in Various Regions (2).

The appearance of numerous swarms of Moroccan locust has been reported in the following regions of Italy :

Sardinia : provinces of Cagliari, Nuoro and Sassari ;

Sicilia : provinces of Palermo (Commune of Randazzo) ;

Calabria : Communes of Sibari and Cornigliano Calabro ;

Apulia : provinces of Foggia and Matera ;

Latium : provinces of Viterbo (Communes of Viterbo and Vetralla) and of

Rome (Communes of Nettuno, Terracina and Monterotondo) ;

Emilia : province of Ravenna.

The most severe invasions are those of Foggia, Matera and Ravenna.

The fact is of interest that this exceptional appearance of locusts is connected with the severe winter just experienced. It is very probable that the intense cold has eliminated the parasites of the locusts.

The same fact has been observed also for the Aphididae.

Turkey : Pests of Crop Plants (3).

Zabrus gibbus F. : widely distributed and very destructive of cereals.

Otiorrhynchus peregrinus Stierl. : the adult attacks vine shoots in the Province of Smyrna and in the neighbourhood of Constantinople.

Tanymecus palliatus F. : causes similar damage.

Ino ampelophaga Bayle : the caterpillars attack vine buds ; they are widely distributed throughout the vine growing districts. ;

(1) Communication from the official correspondent to the Institute, Dr. N. B. UPPAL, Plant Pathologist to the Government, Bombay Presidency, Poona.

(2) Communication from the R. Stazione di Patologia vegetale in Rome, official correspondent of the Institute.

(3) Communication from the official correspondent to the Institute, Mr. SUREYA, Councillor of State, Angora.

Dociostaurus maroccanus Thunb.: hatching of eggs has been ascertained in the provinces of Urfa, Diarbekiri and Smyrna. The methods of control consist in the use of arsenic compounds and zinc barriers.

Eurygaster integriceps: the hibernating adults appeared in the middle of March, 1929. At the beginning of April, after pairing, the females began to lay on the leaves of cereals. This species is distributed throughout the province of Adana and on the Turco-Syrian frontier. The damage is checked by hand-picking the insects.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Germany. — The Order of 7 March 1929 (*Reichsministerialblatt*, 1929, S. 253) contains amendments to the Order of 1 February 1923 (*Reichsministerialblatt*, 1923, S. 145) which deals with the methods of giving effect to paragraphs 1-3 of the Law relating to the control of "grape phylloxera" (*Phylloxera vastatrix*).

A definition is given in the Order and the expression "exposed to the risk of contamination" introduced into the Law.

Several Sections of the Order refer to the appearance of galls on vine leaves, such as have recently been reported frequently in Germany as the result of phylloxera.

The following instructions are given:—

Each year an inspection must be made with the object of ascertaining whether these galls are to be found on the leaves of vines not pertaining to European vines (*Vitis vinifera* and *V. silvestris*) grown in contaminated or suspected areas or areas exposed to contamination;

when it is ascertained that the roots are contaminated, all the non-European vines, with the exception of grafted plants and nurseries, in the area must be destroyed;

when it is ascertained that the leaves are contaminated, a safety belt, twenty metres broad, must be added to the area where the vines are to be destroyed, the vine parts above ground to be burnt.

When the fact of contamination is ascertained control inspections are prescribed as under:—

in the case of leaf contamination, after a period of four weeks an inspection must take place of the vines in the plantations, which are exposed to risks of contamination or suspect, in order to discover whether or no there are galls on leaves or roots. This inspection must take place so far as possible for each individual vine. A further inspection of the roots shall be made during the following year and two later inspections in the course of a further five-year period;

in the case of leaf contamination, an inspection must at once be made and, if possible, for each individual vine, of the roots of the suspect plants, such inspection to be twice repeated in the course of the next 5-year period.

When the leaves are found to be contaminated no exception can be allowed to the provisions of the Law relating to the prohibition of the transport of vines or parts of vines, etc. outside the contaminated areas.

Cultivation of non-European vines in any district is forbidden so long as the

suppression of phylloxera, by adopting the usual processes for destroying the parasite, is not declared to be impracticable.

Importation of vines from abroad is forbidden except under the authority of the Minister for Food and Agriculture. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1929, 9. Jahrg., Nr. 6, S. 55-58).

* * By an Order of 27 April, 1929 (*Deutscher Reichsanzeiger*, 1929, Nr. 104) the importation of fresh cherries attacked or suspected of being attacked by the maggot of the cherry fruit fly (*Rhagoletis cerasi* L.) is prohibited till further notice. Fresh cherries may be admitted only via certain fixed customs offices and must be accompanied by a certificate of origin issued by the communal authorities of the place of origin and a sanitary certificate issued by a competent official of the Plant Protection Service of the country of origin, such certificate vouching for the consignment being free from the maggot of the cherry fruit fly. At the customs offices of entry the consignments will be again examined for the presence of the maggot by German experts. The Order is not operative in respect of the bringing in of fresh cherries in small quantities by residents in customs frontier areas, nor for farms through the land of which the customs frontier passes. Direct transit of cherries through Germany under customs supervision is permitted. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1929, 9. Jahrg., Nr. 6, S. 58).

* * The operation of the Order of 27 September, 1928 (*Reichsgesetzblatt*, 1928, Teil I, S. 375), in accordance with which the import of barley from the United States of America (with the exception of the States of Texas, Kansas, Oklahoma and Colorado) is permitted only after an inspection proving the consignment to be free from any noxious element, is extended to 31 August 1929, by an Order of 24 May, 1929 (*Deutscher Reichsanzeiger*, 1929, Nr. 118). (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin 1929, 9. Jahrg., Nr. 6, S. 58).

England (1). — By virtue of the Importation of Raw Cherries Order of 1929, dated May 24, 1929 for the prevention of the introduction of the Cherry Fruit Fly [*Rhagoletis cerasi*], the landing in England or Wales after June 15, 1929, of any raw cherries grown in any European country other than France or Italy is prohibited unless each consignment is accompanied by a certificate of origin visé by a Local Authority in the country of origin, stating the country and place where the raw cherries were grown.

Raw cherries grown in Italy shall not be landed in England or Wales :—

(a) during the period beginning June 11, 1929 and ending June 20, 1929, unless accompanied by a certificate issued by an officer of the Italian Phytopathological Service stating that the raw cherries included in the shipment were not grown within the Region of Apulia ;

(b) during the period beginning June 21, 1929 and ending on June 30, 1929, unless accompanied by a certificate issued by an officer of the Italian Phytopathological Service stating that the raw cherries included in the shipment were not grown within the Regions of Apulia, Basilicata, Calabria or Campania ;

(c) after June 30, 1929.

Raw cherries grown in France shall not be landed in England or Wales :—

(1) Communication from the Ministry of Agriculture and Fisheries, London, official correspondent of the Institute.

(a) during the period beginning on June 16, 1929 and ending on June 20, 1929, unless accompanied by a certificate issued by an officer of the French Phytopathological Service stating that the raw cherries included in the shipment were not grown within the Departments of Basses-Pyrénées, Hautes-Pyrénées, Haute-Garonne, Ariège, Pyrénées-Orientales, Aude, Tarn, Hérault, Gard, Bouches-du-Rhône, Vaucluse, Var, Alpes-Maritimes, Basses-Alpes, Hautes-Alpes, Ardèche, and Drôme ;

(b) during the period beginning June 21, 1929 and ending on July 6, 1929, unless accompanied by a certificate issued by an officer of the French Phytopathological Service stating that the raw cherries included in the shipment were not grown within the Departments cited above and in the Departments of the Landes, Gironde, Charente-Inferieure, Charente, Dordogne, Lot-et-Garonne, Gers, Tarn-et-Garonne, Lot, Corrèze, Puy-de-Dôme, Cantal, Aveyron, Lozère, Haute-Loire, Loire, Rhône, Ain, Isère, Savoie and Haute-Savoie ;

(c) after July 6, 1929, unless accompanied by a certificate issued by an officer of the French Phytopathological Service stating that the raw cherries included in the shipment were grown within the Department of Calvados, and the Cantons of Quillebœuf, Pont-Audemer, Beuzeville, Routot, Montfort-sur-Risle, Corneilles, St. Georges-du-Vieuvre, Bourgheroulde, Amfreville, Brionne, and Thiberville in the Department of Eure.

The certificate may cover all the consignments included in one cargo, and shall be delivered to an officer of Customs and Excise at the same time as, and together with, the entry relating to the consignment.

Raw cherries landed in England or Wales without such a certificate as is prescribed in this Order shall be forthwith destroyed by and at the expense of the importer unless they are re-exported or are disposed of in accordance with the terms of a licence issued by an Inspector of the Ministry of Agriculture and Fisheries.

The Inspector may, upon production, if so required, of his appointment or authority, open and examine and take samples of the contents of any consignment or package containing, or suspected to contain, raw cherries which have been shipped, or are suspected to have been shipped, from any European country and enter any premises upon which any such raw cherries are or are suspected to be.

This Order shall remain in force until September 30, 1929.

Bermuda (1). — In virtue of the Regulations made by the Board of Agriculture on 11th December, 1928, under Section 29 of the Agricultural Inspection Act, 1921, and approved by the Governor in Council on the 24th January, 1929, all fields of Easter lilies [*Lilium longiflorum* var. *eximium*] shall be subject to inspection for the presence of virus and other diseases, and off-type and other undesirable plants.

No fields of lilies shall be inspected for certification except on application for inspection by the grower or approved co-operative organisation to which he may belong, made on or before 1 January in each year.

On or before 1 June in each year certificates shall be issued with respect to fields which have met the requirements of certification and notice shall be given to owners of fields which have failed to meet such requirements.

The maximum percentages of diseased and otherwise undesirable plants acceptable in certified fields shall be fixed from time to time by the Director of Agriculture

(1) Communication from the official correspondent to the Institute, Mr. E. A. McCallan, Director of Agriculture, Department of Agriculture, Agricultural Station, Paget East, Bermuda.

and approved by the Board of Agriculture, and published prior to 1 January in each year.

All bulbs and other nursery stock to be exported from these Islands shall be inspected at the time of packing, and Easter lily bulbs shall be packed under the direction of the Inspector of the Department of Agriculture for the purpose of ascertaining if suitable for shipment with respect to maturity, size, quantity, and freedom from pests and observable diseases.

Certificates of field inspection of Easter lilies shall be presented by the growers to the Inspectors when Easter lily bulbs are delivered at the packing sheds, and no Easter lily bulbs shall be accepted at the packing sheds for which field certificates have not been issued.

In no case will immature Easter lily bulbs be certified.

The percentage of double crowns acceptable in Easter lily bulbs shall be approved by the Board of Agriculture.

All nursery stock for export shall be packed in cases and in packing material approved by the Director of Agriculture.

Application for licenses to pack and ship Easter lily bulbs shall be made to the Director of Agriculture.

France. — By Ministerial Decree of 31 May 1929, the Ministerial Decree of 6 and 22 May 1928, enacted in view of the control of the "cherry fruit fly" (*Rhagoletis cerasi*) and relating to the Plant Health Regulations for the export of cherries to Great Britain, are, and will remain, in force. (*Journal officiel de la République Française*, Paris, 1929, L^{XI}^{ème} année, n^o 127, p. 6088-6089).

* * The following information has been sent by the Minister of Agriculture to cherry growers and exporters sending consignments to Great Britain :—

The export of cherries intended for Great Britain must take place exclusively from the ports of Boulogne, Calais, Dieppe, Dunkirk, Honfleur and Saint-Malo.

The parcels containing cherries will be examined at the marine stations of the ports of embarkation by the agents of the "Service de la défense des végétaux et de l'inspection phytopathologique".

It is obligatory that the parcels presented for examination should be provided with the association label required by the regulations of the professional groups of producers and exporters, whose statutes have been previously accepted by the Minister of Agriculture, as well as with the label affixed by the forwarding station. They will be examined by the only Service on presentation of the notice of consignment addressed by the exporter to the representative of the professional groups to which he belongs, at the marine station of the port of embarkation.

The controllers, after having ascertained that all the conditions prescribed by the British regulations have been duly observed, will deliver, if necessary, a certificate, stating that the examination of the cherries has not revealed the presence of the larvae of *Rhagoletis cerasi* ("cherry fruit fly").

The labels on the parcels referred to above, in cases where the presence of "cherry fruit fly" has been proved, shall be destroyed or cancelled, and the parcels shall be sent back immediately to the destination as determined by the representative of the professional groups.

The railway companies will make all arrangements for withdrawing these parcels from the embarkation quay without delay and for sending them to the places indicated by the representative.

The Departments and other French places of origin and the periods during which it is allowed to export cherries to Great Britain are fixed by the "Importation of Raw Cherries Order of 1929" of 24 May 1929 (see this *Bulletin*, 1929, No. 7, pp. 101-2). (*Journal officiel de la République Française*, Paris, 1^{er} juin 1929, L^{XI}^{ème} année, n^o 127, p. 6115).

Italy. — In consequence of the duly verified presence of "grape phylloxera" [*Phylloxera vastatrix*] in the Commune of Sinio, province of Cuneo, a Ministerial Decree of 4 June 1929 has declared the area of this Commune to be infected with phylloxera. (*Gazzetta ufficiale del Regno d'Italia*, Roma, 24 giugno 1929, anno 70^o, n. 146, p. 2970).

**** The Citrus Chamber** ("Camera Agrumaria") with head-quarters in Messina has decided to award a prize of L. it. 1000.00, to the discoverer of a remedy for the "mal secco" of citrus trees, a disease which is spreading especially on the East coast of Sicily (1).

Wales. — See England.

Union of South Africa (2). — By Government Notice No. 520 of 1929 the following regulations have been issued in connection with the eradication of the citrus disease called "psorosis" or "scaly bark":—

1. Trees infected with "psorosis" or "scaly bark" shall be destroyed in the following manner:—

The tree shall be burned *in situ* after it has been covered with straw or other inflammable material and sprayed with paraffin. Thereafter the stump shall be dug out at least eighteen inches below the surface of the soil and as many as possible of the main roots removed. These shall also be destroyed by fire on the spot.

2. The Minister of Agriculture may grant exemption from the provisions of regulation No. 1 under the following circumstances:—

(i) If he is satisfied that the presence of the infected trees does not constitute a danger to trees in neighbouring orchards; and

(ii) if he deems it advisable that such trees should be left for purposes of experiment or observation by officers of his Department.

(1) From experiments made on the spot undertaken by the Royal Plant Pathology Station at Rome, a result has already been obtained, of which there is constant supplementary confirmation, showing that the chief cause of "mal secco" lies in certain not yet fully defined properties of the soil, while the presence of the fungus *Colletotrichum gloeosporioides* Penz. reveals in a specific manner the effects which these properties have on the plants. (See PETRI, L. Rassegna dei casi fitopatologici osservati nel 1928. *Bollettino della R. Stazione di Patologia vegetale* [di Roma], Firenze, 1929, anno IX, nuova ser., n. 1, pp. 31-32). (ED. NOTE).

(2) Communication from the official correspondent to the Institute, Dr. E. M. DOIDGE, Chief of Division of Botany, Horticulture, and Entomology, Department of Agriculture, Pretoria, Union of South Africa.

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[In Portuguese, with summary in English. A contribution to the study of the biology of *S. infrapospita*, endoparasite of *I. purchasi*. A detailed description of the larva and pupa of *S. infrapospita* is given for the first time].

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[In Portuguese, with summary in English. In addition to other matter, descriptions are given of 2 genera and 16 species new to science, some of which are endoparasites of ants].

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[*Atta sexdens* L.].

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DE SOUSA DA CAMARA, EMMANUELE. Minutissimum Mycoflorae subsidium Sancti Thomensis insulae. II. Mycetes in Laboratorio Pathologiae vegetalis Instituti Agronomici Olisipponensis observata. *Revista Agronómica*, Lisboa, 1929, ano XVII, nº 1, pags. 13-24, figs. 1-20.

[In this contribution to the mycological flora of the island of São Thomé mention is made of the following: *Leptosphaeria Almeidae* n. sp., on leaves of *Cinnamomum zeylanicum*; *Macrophoma superposita* n. sp., on the leaves of *Ananas sativus*; *Phyllosticta polypsecadiospora* n. sp., on leaves of *Anona muricata*; *Polylagenochromatia Theobromae* n. gen. et n. sp., on the bark of the stem of *Theobroma Cacao*; *Eliasiella tricotampta* n. sp., on leaves of *Bougainvillea* sp. Latin diagnoses are given of the new genus and of the new species].

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[*Puccinia* spp.].

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[*Phylloxera vastatrix*].

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[A description is given in Portuguese of *Pulvinaria paranaensis* n. sp., on *Ilex paraguayensis* (?) in the States of Rio Grande do Sul and Paraná; *Ceroplastes diospyros* n. sp., on *Diospyros Kaki* in the State of São Paulo; *Pseudalichtensia brasiliensis* n. gen. et n. sp., on *Phoradendron dipterum* and *Nectandra* sp., also in the State of São Paulo].

INSTITUT INTERNATIONAL D'AGRICULTURE. La législation du commerce des plantes dans les différents pays. A l'usage des agriculteurs, des importateurs et des exportateurs de plantes. Rome, 1929, XII+175 p.

[The countries reviewed in this work to which a supplement will appear are:—Germany, Argentina, Belgium, Brazil, Denmark, Egypt, Spain, United States of America, Finland, France, French West Africa, Algeria, Indo-China, Morocco, Regency of Tunis, Great Britain (England and Wales, Scotland), Irish Free State, Australia, Canada, the Indian Empire, New Zealand, Union of South Africa, Guatemala, Italy, Japan, Latvia, Lithuania, Luxemburg, Norway, Holland, Dutch East Indies, Peru, Poland, Sweden, Switzerland, Uruguay].

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[In various regions of Italy on woody plants (vine, olive, fruit-trees, citrus-trees, forest, ornamental and industrial plants) and herbaceous plants (cereals, forage plants, vegetables, industrial crops, garden plants). The presence of *Bacterium Malvacearum* and *Sterigmatocystis nigra* is also noted on cotton in Eritrea. A summarised report is also given of certain remedies advised against some diseases and the more injurious parasites].

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[Positive experimental results against *Chrysomphalus aonidum*, *Chrys. dictyospermii*, *Parlatoria pergandii*, on the orange; *Aspidiotus lataniae*, *Diaspis zamiae*, *Pseudococcus adonidum*, on *Strelitzia augusta*; *Parl. blanchardi*, on the date palm, in Algeria].

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[Favourable results by treatment with "Uspulun" against *Fusarium* on plants of *Cedrus atlantica*, *C. Deodara*, *Pinus ponderosa*, *P. Murrayana*].

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raes do Brasil. *Archivos do Instituto Biologico de Defesa Agricola e Animal*,
São Paulo - Brasil, 1928, vol. I, pags. 239-252.

[In Portuguese, with summary in English. In advance of the detailed descriptions which are to be given later, this note contains a list of the Nematoda observed in Brazil on coffee, banana, orange tree, sugar cane, cassava, potato, onion, clove tree, mosses and cotton. The following Nematoda are included in this list: *Rhabditis coffeae* n. sp., *Diploscapter rhizophilus* n. sp., *Cephalobus persegnis* Bastian var. *paranensis* n. var., *Lycolaimus iheringi* n. gen. et n. sp., *Macrolaimus crucis* Maupas var. *tenuis* n. var., on coffee; *Rhabditoides longicauda* n. gen. et n. sp., *Rhabditis musicola* n. sp., *Odontopharynx piracicabensis* n. sp., *Tylenchus davaini* Bastian var. *gracilis* n. var., *Rhabditoides longicauda* var. *fruticola* n. var., *Acrostichus toledoi* n. gen. et n. sp., *Loxolaimus longicauda* n. subgen. et n. sp., *Diploscapteroides brevicauda* n. gen. et n. sp., *Cephalobus* (?) *bursifer* n. sp., *Buonema richteri* Jaegerskioeld var. *cantareirensis* n. var., *Craspedonema elegans* n. sp., *Cr. elegans* var. *paulistanum* n. var., *Mononchoides longicauda* n. gen. et n. sp., *Tylenchorrhynchus robustus* de Man var. *pseudorobustus* Steiner f. *brasiliensis* n. f., on banana; *Tylenchus coffeae* Zimm. var. *brevicauda* n. var., *Diplogaster bicornis* n. sp., *Demaniella floribella* n. sp., *Dia-stolaimus papillatus* n. gen. et n. sp., *Macrolaimus citri* n. sp., on orange tree; *Tripyla monohystera* de Man var. *longicauda* n. var., *Diploscapter rhizophilus* n. sp., *Dipl. rhizophilus* var. *cannae* n. var., *Cephalobus onyuroides* de Man. var. *brasiliensis* n. var., on sugar cane; *Dipl. rhizophilus* n. sp. typ., on cassava; *Peronilaimus saccai* n. gen. et n. sp., on the clove tree; *Tripyla filicaudata* de Man var. *hoehnei* n. var., on mosses].

RAVAZ, L., et VERGE, G. L'excoriose. *Annales de l'Ecole Nationale d'Agriculture de Montpellier*, Montpellier, s. d., nouv. sér., tome XIX, fasc. IV, p. 235-255, fig. 17-25, 2 pl. en coul.

[A vine disease caused by *Phoma flaccida* Viala et Ravaz].

RIVERA, V. Cicatrizzazioni sperimentali di fusto di « *Ricinus communis* », determinate da « *Pseudomonas fluorescens* » (Flügge) Migula. *Rendiconti delle sedute della Reale Accademia Nazionale dei Lincei*, Classe di Scienze fisiche, matematiche e naturali, Roma, 1929, vol. IX, fasc. 6, pp. 510-512, tav. I.

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[*Cercospora beticola*].

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[*Lachnodius greeni*].

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[Contains 19 reports on sanitary plant inspections carried out in different parts of Spain by M. BENLLOCH, J. DEL CAÑIZO, F. DOMÍNGUEZ and F. LÓPEZ GARCÍA].

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[*Hoplocampa minuta*, *H. flava*].

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TORO, RAFAEL A. Una epifitotia del café en Cúcuta. *Revista de Industria*, Bogotá, (Colombia), 1929, vol. V, núm. 58, págs. 304 y 305, figs. 1 y 2.

[*Corticium Koleroga* (Cke.) Höhn.].

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[*Ramularia bellunensis* Speg. on *Chrysanthemum frutescens*, in Turin].

VON JACZEWSKI, A. A. Zur Phylogenie der Pilze. *Phytopathologische Zeitschrift*, Berlin 1929, Bd. I, Heft 2, S. 117-150.

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[*Fusarium culmorum* (W. G. Sm.) Sacc., *Fus. anthophilum* (A. Br.) Wr., *Fus. acuminatum* Ell. et Ev. emend. Wr., *Fus. herbarum* (Corda) Fries, *Fus. sporotrichoides* (Sherb.), etc. in England].

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